



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,603	10/07/2005	Karl Bechtold	2003CH109	6331
25255 7590 10/01/2008 CLARIANT CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 4000 MONROE ROAD CHARLOTTE, NC 28205				
EXAMINER				
REDDY, KARUNA P				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
10/01/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,603

Applicant(s)

BECHTOLD, KARL

Examiner

KARUNA P. REDDY

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2008 and 02 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 7/30/2008 and 9/2/2008 has been entered.

Claims 1, 3 and 9 are currently amended. Accordingly, claims 1-15 are currently pending in the application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over DiBattista et al (US 3, 962, 123) in view of Beifuss et al (5, 756, 500) and Takei et al (US 6, 444, 320 B1).

DiBattista et al disclose a stable phenolic antioxidant dispersion prepared by adding a melt of the phenolic antioxidant to water, where either or both of the antioxidant (reads on light stabilizer) and water contain an anionic surfactant or nonionic surfactant. These aqueous dispersions are useful in stabilization of substrates which are better stabilized with water dispersible antioxidants against oxidative degradation induced by

light (abstract). The emulsifying agent is preferably present in an amount from 2 to 30% by weight of the phenolic antioxidant (column 3, lines 24-27). The amount of water in the dispersion is chosen so that final concentration of phenolic antioxidant in the dispersion is preferably from 50 to 70% (column 3, lines 57-60).

See example 4 wherein the antioxidant is mixed with dispersing agent and melted at 60 to 70°C (reads on the melting point of at least 35°C) and the mixture is added to a solution of surfactant and water. The composition can be successfully added to a variety of substrates which exist in aqueous form and include acrylics (column 4, lines 31-42). It is possible to add the composition to a polymer latex and to keep the composition in aqueous dispersed form until the latex is formed into the final product such as a coating (column 4, lines 50-55). The phenolic antioxidant dispersion consists of an extremely fine dispersion of particles with particle size ranging from 1-3 microns. The dispersion exhibits a shelf storage stability at room temperature in excess of 1 year (column 5, lines 11-15).

DiBattista et al is silent with respect to polyglycol as a solubilizer; biocide and its weight percent; oleic acid as flow improver; viscosity of the aqueous dispersion; storage stability of more than 4 weeks at 50°C; and the method of improving storage stability.

However, Beilfuss et al teach aqueous dispersion containing active ingredients with algicidal or fungicidal effect (abstract) for coatings whose surfaces are frequently attacked by algae or fungi (column 1, lines 6-8). The dispersion can include usual auxiliaries such as high-boiling solubilizers (column 2, lines 62-63). Examples of solubilizers include polypropylene glycol, polyethylene glycol (column 3, lines 14-22) and read on the polyglycol of present claims. In some cases, the solubilizers have a consistency regulating effect and/or act as low temperature stabilizers. The solubilizers

can be used in an amount of up to 15 wt%. The stability and handling properties of dispersions containing such dispersion agents and/or solubilizers is surprisingly good even after prolonged storage under very unfavorable temperature and moisture conditions. As a rule, demulsification of the dispersion components is avoided (column 3, lines 24-48). Therefore, it would have been obvious to use polyglycol as a solubilizer and add fungicide to the aqueous dispersion of DiBattista et al, for the above mentioned advantages.

With respect to oleic acid as a flow improver, Takei et al teach anti-reflective coating compositions (abstract) into which is incorporated a flow promoting agent to increase flowability of the composition. If a flow promoting agent is utilized, it should be present in the composition, preferably at a level of from about 0 to 10% by weight. Examples of suitable flow promoting agents include oleic acid derivatives (column 4, lines 29-40). Case law holds that the selection of a known material based on its suitability for its intended use supports *prima facie* obviousness. *Sinclair & Carroll Co vs. Interchemical Corp.*, 325 US 327, 65 USPQ 297 (1045).

With respect to viscosity of aqueous dispersion and storage stability of more than 4 weeks, in light of the fact that the composition comprises substantially similar components as that of the present claims, one of ordinary skill in the art would have a reasonable basis to believe that the composition would exhibit similar properties. Since PTO cannot conduct experiments, the burden of proof is shifted to the applicants to establish an unobviousness difference. See *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977).

With respect to wt% of biocide, it is the examiner's position that biocide amount is a result-effective variable (MPEP 2144.5) since the amount used clearly affects the

antifungal activity or bacterial infestation. Hence, the choice of a particular amount of biocide (such as the amount in present claims) is a matter of routine experimentation and would have been well within the skill level of, and thus obvious to, one of ordinary skill in the art.

With respect to the order of mixing various components, the composition is substantially similar to that of DiBattista et al in view of Beilfuss et al and Takei et al, though the sequence of mixing various components differs. Case law holds that the selection of any order of mixing ingredients is prima facie obvious. See *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930).

Response to Arguments

4. Applicant's arguments with respect to rejection of claims 1-15 under 35 U.S.C. 103(a) as being unpatentable over Hess et al (US 4, 780, 494) in view of Beilfuss et al (5, 756, 500) and Takei et al (US 6, 444, 320 B1) have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KARUNA P. REDDY whose telephone number is (571)272-6566. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone

Art Unit: 1796

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. P. R./

Examiner, Art Unit 1796

/Vasu Jagannathan/

Supervisory Patent Examiner, Art Unit 1796